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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,522	10/12/2001	Bidyut Parruck	AZA-003-1D/2001-P004	3113
293	7590	10/04/2005	EXAMINER	
Ralph A. Dowell of DOWELL & DOWELL P.C. 2111 Eisenhower Ave. Suite 406 Alexandria, VA 22314			DUONG, DUC T	
			ART UNIT	PAPER NUMBER
			2663	

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/976,522

Applicant(s)

PARRUCK ET AL.

Examiner

Duc T. Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,6-9 and 45-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-9 and 45-53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/12/01</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-3, 7, 9, 45, 47-49, and 51-53 are rejected under 35 U.S.C. 102(e) as being anticipated by Bianchini, Jr. et al (US Patent 6,463,063 B1).

Regarding to claims 1 and 9, Bianchini discloses a multi-service segmentation and reassembly (MS-SAR) integrated circuit 10 (fig. 7), comprising a first bus interface 14 (col. 2 lines 42-45); lookup circuitry 26 (col. 2 lines 62-65); segmentation circuitry 30 (col. 3 lines 10-12); reassembly circuitry 28 (col. 3 lines 12-15); a second bus interface 20 (col. 2 lines 45-47); and a data path (implicitly shown) extending from the first bus interface 14 to the lookup circuitry 26, and from the lookup circuitry 26 to the segmentation circuitry 30, and from the segmentation circuitry 30 to the reassembly

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circuitry 28, and from the reassembly circuitry 28 to the second bus interface 20 (col. 2 lines 47-61), wherein both cell-protocol traffic and packet-protocol traffic pass over the data path from the first bus interface 14, through the lookup circuitry 26, through the segmentation circuitry 30, through the reassembly circuitry 28 and out of the integrated circuit 10 from the second bus interface 20 (col. 3 lines 28-40), the lookup circuitry 26 analyzing the cell-protocol traffic and outputting information that causes the cell-protocol traffic to be processed in a first way (placing a tag identifying cell traffic as cell data) by the segmentation circuitry 30 and the reassembly circuitry 28 (col. 3 lines 2-9), the lookup circuitry 26 analyzing the packet-protocol traffic and outputting information that causes the packet-protocol traffic to be processed in a second way (placing a tag identifying packet traffic as packet data) by the segmentation circuitry 30 and the reassembly circuitry 28 (col. 3 lines 2-9).

Regarding to claim 2, Bianchini discloses the integrated circuit is operable in a first ingress mode such that traffic is output from the integrated circuit to a cell-based switch fabric via the second bus interface (col. 3 lines 41-52), and wherein the integrated circuit is operable in a second ingress mode such that traffic is output from the integrated circuit to a packet-based switch fabric via the second bus interface (col. 3 lines 53-63).

Regarding to claim 3, Bianchini discloses the integrated circuit is operable in a first egress mode such that traffic is received onto the integrated circuit from a cell-based switch fabric via the first bus interface (col. 3 lines 64-67 and col. 4 lines 1-7), and wherein the integrated circuit is operable in a second egress mode such that traffic

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is received onto the integrated circuit from a packet-based switch fabric via the first bus interface (col. 4 lines 8-22).

Regarding to claim 7, Bianchini discloses a memory manager circuitry 32, wherein the data path extends from the segmentation circuitry to the reassembly circuitry via the memory manager circuitry (fig. 7 col. 3 lines 12-17).

Regarding to claims 45, 49, and 53, Bianchini discloses an integrated circuit 10 (fig. 7), comprising a first bus interface 14 (col. 2 lines 42-45); a second bus interface 20 adapted for coupling to a switch fabric 22 (col. 2 lines 47-51), and means for receiving network information from the first bus interface 14, a first portion of the network information being received in a cell-protocol, a second portion of the network information being received in a packet-protocol (col. 2 lines 62-66), the means also being for passing the network information through a single data path from the first bus interface 14 and to a payload memory 32 and then through the single data path from the payload memory 32 and to the second bus interface 20 (col. 3 lines 12-17).

Regarding to claims 47 and 51, Bianchini discloses the means includes a segmentation engine 30, the segmentation engine 30 being controlled to process the first portion of network information in a first way and to process the second portion of network information in a second way (fig. 7 col. 3 lines 41-63).

Regarding to claims 48 and 52, Bianchini discloses the means includes a reassembly engine 28, the reassembly engine being controlled to process the first portion of network information in a first way and to process the second portion of network information in a second way (fig. 7 col. 4 lines 8-33).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bianchini in view of Cheesman et al (US Patent 6,680,933 B1).

Regarding to claim 6, Bianchini discloses all the limitations with respect to claim 1 including the cell-protocol traffic is ATM traffic. Bianchini fails to teach the packet-protocol traffic is MPLS traffic. However, Cheesman discloses a telecommunication apparatus for switching protocol data units including MPLS traffic (fig. 4 col. 8 lines 30-37). Thus, it would have been obvious to a person of ordinary skill in the art to employ a switching of MPLS traffic as taught by Cheesman in Bianchini's system to offers different type services for users that involve a combination of different traffic switching.

5. Claims 8, 46, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bianchini.

Regarding to claim 8, Bianchini discloses all the limitations with respect to claim 1 including a buffer (memory) with a plurality of queues for storing cell-protocol traffic and packet-protocol traffic. Bianchini fails to teach the queues are all equal size. However, to arrange all the queues to be equal size would have been obvious to a person of ordinary skill in the art since such arrangement can be easily implemented

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through hardware and software for the purpose of providing an efficient mechanism of storing cells and packets.

Regarding to claims 46 and 50, Bianchini discloses all the limitations with respect to claims 45 and 49, except for wherein the payload memory is a memory external to the integrated circuit. However, to the payload memory to be external of the integrated circuit would have been obvious to a person of ordinary skill in the art since such arrangement would reduced the occupies space in the integrated circuit. Furthermore, all the essential elements and operation of the claim, except for the integration of parts, are found in the reference. Thus, it appears the unity or diversity of parts would depend more upon the choice of the manufacture, and convenience and availability of the machines and tools necessary to construct the user's device, than on any inventive concept. See *In re Larson*, 144 USPQ 347 (CCPA 1965), and *In re Lockhart*, 90 USPQ 214 (CCPA 1951)

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc T. Duong whose telephone number is 571-272-3122. The examiner can normally be reached on M-F (9:00 AM-5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DD

DD

  
RICKY NGO  
PRIMARY EXAMINER

9/30/05